

5. (Four Times Amended) An isolated polypeptide comprising a sequence of amino acids selected from the group consisting of:

- (a) amino acids 848-1278 of a type F botulinum toxin (SEQ ID NO: 1)
- (b) amino acids 848-991 of a type F botulinum toxin (SEQ ID NO: 2)
- (c) amino acids 992-1135 of a type F botulinum toxin (SEQ ID NO: 3), and;
- (d) amino acids 1136-1278 of a type F botulinum toxin (SEQ ID NO: 4)

6. (Four Times Amended) An isolated polypeptide comprising a dimer of the sequences selected from the group consisting of:

- Dmt H3*
- (a) amino acids 848-1278 of a type F botulinum toxin (SEQ ID NO: 1)
 - (b) amino acids 848-991 of a type F botulinum toxin (SEQ ID NO: 2)
 - (c) amino acids 992-1135 of a type F botulinum toxin (SEQ ID NO: 3), and
 - (d) amino acids 1136-1278 of a type F botulinum toxin (SEQ ID NO: 4)

7. (Four Times Amended) A polypeptide composition comprising:

- G2*
- (1) an isolated polypeptide according to claim 5; and
 - (2) an isolated polypeptide that facilitates or enhances purification of the composition.

*Dmt H4
G3*

8. (Three Times Amended) A polypeptide composition comprising an isolated fusion protein of a sequence of amino acids selected from the group consisting of SEQ

G 3
cont
ID NO:1, SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4, fused to a polypeptide that facilitates or enhances purification of the composition.

Biot H7
12. (Three Times Amended) A vaccine comprising a pharmaceutically acceptable carrier and a polypeptide according to claim 5.

13. (Amended) A recombinant DNA encoding a polypeptide according to claim 5.

14. (Amended) A method of producing a polypeptide according to claim 5 comprising the steps of:

- G 4*
Biot H7
- (a) expressing in a host cell a DNA encoding a fusion protein, said protein being a fusion of (i) a fragment or derivative of a type F botulinum toxin, and (ii) a moiety adapted to bind to a chromatography column,
 - (b) obtaining from said host cell an extract comprising the fusion protein, and
 - (c) purifying the fusion protein using a chromatography column.

17. (Amended) A method of making a pharmaceutical composition comprising:

- Biot H9*
G 5
- (a) expressing in a host cell a DNA encoding a fusion protein, said protein being a polypeptide of claim 8,
 - (b) obtaining from said host cell an extract comprising the fusion protein,
 - (c) purifying the fusion protein using chromatography column,
 - (d) incorporating the purified fusion protein into a pharmaceutical composition.

19. (Three Times Amended) A pharmaceutical composition comprising:

- G6
Dent H10 (a) a fusion protein, said protein being a fusion of (i) a polypeptide as described in claim 5, and (ii) a polypeptide that binds to a chromatography column; and
(b) a pharmaceutically acceptable carrier.

21. (Three Times Amended) A pharmaceutical composition according to Claim

G7 19 wherein the fusion protein comprises a polypeptide that binds to an affinity chromatography column.

26. (Amended) An isolated fusion protein comprising (1) a sequence of amino

G8 acids selected from the group consisting of SEQ ID NO:1, SEQ ID NO:2, SEQ ID NO:3, and SEQ ID NO:4, and (2) a polypeptide that facilitates or enhances purification of the fusion protein.

G9 28. (Twice Amended) The fusion protein of claim 26 wherein said *C. botulinum* amino acid sequence consists of SEQ ID NO: 1.

G10 30. (Twice Amended) The fusion protein of claim 26 wherein said amino acid sequence comprises at least one amino acid sequence selected from SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4.
H12